backhoe apparatus, wherein the asphalt paved surface includes an obstruction disposed therein, comprising the steps of:



- (a) heating the asphalt paved surface to form heated asphalt;
- (b) scraping and pulling the heated asphalt proximate to the obstruction with the backhoe apparatus to form a first intermediate; and
- (c) moving the first intermediate from proximate the obstruction to an entrance to the pick-up conveyor with the backhoe apparatus.

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1 to 17 are pending in the application.

Claims 1, 16, and 17 are independent.

Claim 3 has been amended for purposes of consistency with claim 1, from which claim 3 depends.

CLAIMS REJECTIONS

1. Claims Rejections Under 35 USC § 112

Claims 3 to 8 have been rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant refers to as the invention. In particular, with respect to claim 3, the Examiner has objected to the limitation introduced with respect to Step (d) in claim 1. In response, the Applicant submits that claim 3 has been amended such that the subject limitation pertains to Step (e) and not Step (d). As such, the Applicant submits that claim 3 is sufficiently definite.

Claim 4 has been also rejected under 35 USC § 112, second paragraph, for failing to specifically recite an actual method step. In particular, the Examiner has objected to the fact that the limitation has been introduced with respect to the "backhoe apparatus" recited in claim 1. In

response, the Applicant submits that there is no basis for such a rejection. Claim 1 specifically recites, in Step (e), "moving the blended intermediate from proximate the obstruction to an entrance of the pick-up conveyor with the backhoe apparatus." As such, it is clear that the "backhoe apparatus" is an element of the invention as claimed in claim 1. Claim 4 merely introduces a limitation with respect to an element specifically recited in claim 1. As such, the Applicant submits that claim 4 is a proper limitation with respect to an element specifically recited in claim 1 for performing "the moving" action recited in Step (e).

With respect to claims 5 to 8, because claims 5 to 8 are directly or indirectly dependent on claims 3 or 4, the Applicant further submits that claims 5 to 8 are sufficiently definite, and therefore, comply with 35 USC § 112, second paragraph.

2.——<u>Claims Rejections Under 35 USC § 103</u>

The Examiner has rejected claims 1 to 17 under 35 USC § 103 (a) as being unpatentable over Cutler, in view of Smith et al. and Strunk. In particular, the Examiner appears to be of the view that Strunk teaches a roadway construction apparatus comprising a pick-up conveyor (20) having a backhoe apparatus (34) for feeding roadway construction materials into the pick-up conveyor for recycling into the prepared roadway, and that such teaching, in combination with the teachings in Cutler and Smith et al, render the claimed invention unpatentable.

In response, the Applicant submits that claims 1 to 17 are patentable over the cited references. In particular, the Applicant submits that the combination of Cutler, Smith et al., and Strunk do not result in the combination of elements comprising the claimed invention in claim 1.

Claims 1 to 15

Claim 1 covers a method of effecting in-situ rejuvenation of an asphalt paved surface with an asphalt rejuvenating apparatus including a pick-up conveyor and a backhoe apparatus, wherein the asphalt paved surface includes an obstruction disposed therein, comprising the steps of:

- (a) heating the asphalt paved surface to form heated asphalt;
- (b) scarifying the heated asphalt to form a scarified intermediate
- (c) milling the scarified intermediate to form a milled intermediate;
- (d) blending rejuvenating fluid with the milled intermediate to form a blended intermediate, wherein a portion of the blended intermediate is deposited proximate the obstruction; and
- (e) moving the blended intermediate from proximate the obstruction to an entrance of the pick-up conveyor with the backhoe apparatus.

The Applicant submits that Strunk does not teach a person of ordinary-skill in the art touse a backhoe apparatus (34) to feed roadway construction materials into a pick-up conveyor for recycling into the prepared roadway.

In this respect, the Applicant submits that Strunk's backhoe apparatus is not intended to effect removal of existing roadway construction material for subsequent recycling into a prepared roadway. Rather, Strunk's backhoe apparatus is intended for removal of non-roadway construction materials, such as earth and vegetation, to create the necessary space for roadway construction. Strunk's backhoe apparatus (34) is described in Strunk at column 4, lines 33 to 35, as being "used to remove <u>overburden</u> not accessible to scoop 20." The use of Strunk's backhoe in removing non-roadway construction materials is further reinforced at column 4, lines 55 to 61:

"Bucket assembly 34 can be used to excavate an overlying area to the side of the apparatus as, for instance, when profiling a hillside and to take the material removed and place it into the scoop 20. Similarly, bucket assembly 34 can be used to excavate a trench below the level of the apparatus and to lift the material into the scoop 20.

The Applicant submits that none of the material excavated by the backhoe assembly is of a roadway construction material quality. This is apparent in Strunk at column 9 between lines 1 - 9:

"Organic material such as tree stumps is not desirable in a road bed underlayment. Usually all stumps and other organic material are removed before road work begins. The present apparatus can remove small stumps and logs with the articulated bucket assembly. The bucket assembly and the scoop in conjunction with one another can uproot small stumps and the bucket assembly can lift these stumps out of the path of the present apparatus."

Rather than using the excavated material for purposes of road construction, material excavated by Strunk's backhoe apparatus is intended for disposal. Disposal is specifically contemplated in Strunk at column at lines 62 to 68:

"The apparatus may also function as a front-end-loader. In this operating mode, the conveyor is stopped. **Overburden**, rock or unwanted material is collected in the scoop. The scoop is raised and the vehicle is moved to the location where the unwanted material is to be deposited. The scoop is rotated so that the cutting edge is lowered, thus depositing the material."

Notably, Strunk's backhoe apparatus is, at no time, relied upon for "feeding roadway construction materials into the pick-up conveyor for recycling into the prepared roadway". Rather, roadway construction materials are scarified and collected by Strunk's scoop for subsequent processing and, ultimately, recycling. Recycling of existing asphalt road surfaces into a prepared roadway in this manner is specifically described in Strunk at column 9, lines 10 to 22:

"Another especially beneficial use of the present apparatus is in renewing asphaltic road surfaces. Generally, the old road surface must be broken up and hauled away. This necessitates laying a new base for the new pavement. Because the rock crusher is adjustable on its output side for size, it may be set to produce crushed old asphalt pavement fine enough for the new base. Chipper, breaker-type teeth are mounted on the leading edge of the scoop. The scoop simultaneously rips and breaks up the old road surface into pieces small enough to be conveyed

to the rock crusher. The rock crusher reduces the size of the old pavement small enough to be used as underlayment for the new road surface."

Because Strunk's backhoe apparatus is not provided for "feeding roadway construction material sin the pick-up conveyor for recycling into the prepared roadway", the Applicant submits that Strunk's backhoe combined with the teachings of Cutler, and Smith et al., does not disclose all of the elements of the invention as claimed in claim 1. As such, the Applicant submits that the invention as claimed in claim1 is patentable over the cited references.

With respect to claims 2 to 15, claims 2 to 15 are directly or indirectly dependant on claim 1. As such, and relying on the foregoing reasons, the Applicant submits that claims 2 to 15 are patentable over the cited references.

Claims 16 and 17

With respect to claim 16, claim 16 claims, *inter alia*, the step of "... moving the milled intermediate from proximate the obstruction to an entrance to the pick-up conveyor with the backhoe apparatus."

With respect to claim 17, claim 17 claims, *inter alia*, the step of "... moving the first intermediate from proximate the obstruction to an entrance to the pick-up conveyor with the backhoe apparatus."

The Applicant submits that Strunk does not contemplate using his backhoe apparatus for the purpose of feeding roadway construction to a pick-up conveyor. As such, and relying on the foregoing reasons with respect to claim 1, the Applicant submits that claims 16 and 17 are patentable over the cited references.

The Commissioner is hereby authorized to charge any fees, including fees for the additional claims, which may be required to Deposit Account No. 07-1750.

Favourable consideration is earnestly solicited and, if any issues remain outstanding, the

Examiner is invited to telephone the undersigned agent for the applicant at 416-862-5795.

Respectfully submitted

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